



Economic Commission for Europe**Inland Transport Committee****Working Party on Transport Statistics****Seventy-fifth session**

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Item 5 (b) of the provisional agenda

**Data collection, methodological development
and harmonization of transport statistics****Data collection on new mobility and active modes****Note by the secretariat***Summary*

This document highlights the importance of initiating data collection on new mobility and active modes within the Working Party. It addresses the challenges in accurately capturing this data and the necessity for standardized methodologies. The document encourages countries to share their experiences and collaborate in developing a framework for consistent data collection, crucial for informing sustainable urban transport policies and planning.

I. Data collection on new mobility

1. The concept of new mobility, driven by technological advancements and innovations, shifting consumer preferences, and the push for sustainable transport, encompasses new forms of transportation and services. Integral to smart cities and sustainable development, this concept focuses on efficient, eco-friendly, and convenient solutions. It is characterized by shifting the focus from owning to utilizing vehicles.
2. New mobility encompasses diverse concepts and services, including ride services, such as ridesourcing and ridepooling, and fleet sharing. It has become an increasingly prevalent component of urban transport, with the concept's expansion to micro-mobility, including shared bikes, e-bikes, and e-scooters, generally used for short journeys in urban areas.
3. As the transportation landscape evolves, data collection on this relatively new mobility form becomes increasingly essential for policy-making and urban planning. National travel surveys often overlook these data due to the relatively small share of new mobility at the national level.



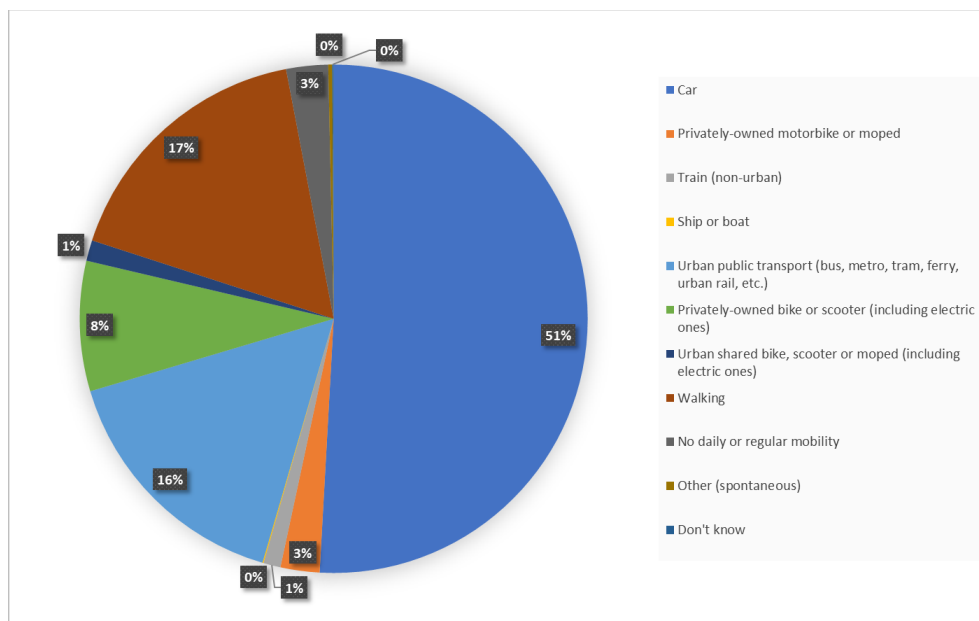
4. In terms of potential methodologies for collecting new mobility data, the most efficient approach would likely involve collaboration between national statistical offices and private sector service providers. This collaboration would naturally require the establishment of regulatory measures. In instances where providers are unwilling to report the necessary information due to concerns about compromising their competitive position (stemming from commercially sensitive data), independent research could be considered, although this alternative would require significantly greater resources.

II. Data collection efforts by international organizations and countries on new mobility

A. European Commission

5. In 2019, the Directorate-General for Mobility and Transport conducted a survey in the European Union Member States to investigate a range of factors related to mobility, including daily and longer-distance travel among Europeans. One of the metrics measured is the primary mode of transport on a typical day, where the primary mode is defined as the mode of transportation that takes the longest travel time. The figure below illustrates the mode share obtained by the survey. The survey distinguishes between privately-owned and shared bikes and scooters, including electric ones.

Primary mode of transport in European Union Member States



Source: European Union. Available on https://data.europa.eu/data/datasets/s2226_92_1_495_eng?locale=en. Accessed on 15 December 2023.

B. International Transport Forum

6. In 2022, the International Transport Forum established a Task Force on Collecting Data on Emerging Mobility Patterns, of which the United Nations Economic Commission for Europe is a member. This task force aimed to develop a common framework for national statistical offices and other stakeholders to collect, compile and report data on emerging mobility, ensuring comparability and reliability.

7. The data on emerging mobility under the focus of this Task Force mainly include, but are not limited to, travellers' background and travel patterns (e.g. trip purpose, frequency), travel demand of non-motorised mobility (walking and cycling), vehicle-kilometres performed by bikes (incl. shared bikes), shared e-scooters, shared cars (incl. car-sharing and ride-hailing services), etc.¹

C. United Kingdom of Great Britain and Northern Ireland

8. The United Kingdom has thus far taken the approach of not establishing dedicated data collection(s) to cover shared mobility. Instead, it relies on the scope of its National Travel Survey (of England) being wide enough to capture all travel, both by new and established modes. This has left a need to adapt face-to-face and travel diary led survey methods to encompass the new modes of travel, which avoids the need to make regulatory changes to compel shared mobility operators to share data. Over the last several years, the coding framework for each transport mode has been updated to ensure modes such as e-bike and e-scooter are recorded separately. Fieldworkers receive training on the new modes as part of their annual training and reference materials are updated accordingly. Challenges with this approach include a low prevalence of recording for some of the shared mobility travel options in the dataset. For e-scooters in particular, exploratory analysis has shown that there may be some under-recording of such journeys for several reasons, including some confusion over the legality of e-scooter use and whether a journey which potentially breaks the rules should be recorded. The research has also shown that there is some variability in the understanding of fieldworkers and therefore respondents about whether e-scooter journeys of less than a mile should be recorded (as some equivalent "short walks" are not required to be recorded) and this may be leading to some under-recording. Training materials have been updated to try to address these issues.

9. A similar approach has had to be taken with road collision data, whereby the lead time of updating police data collection methods can be more than five years. In lieu of this the United Kingdom has put in place interim measures to do free text analysis of police road collision reports to identify e-scooter collisions,² separately matching against hospital data³ as a means of understanding the uncertainty in this approach.

10. The recommendations from the latest review of the police data are now being implemented, including the introduction of a new 'powered personal transporter' vehicle category to capture micro-mobility devices including, but not limited to, e-scooters, with improved guidance to reporting police forces. Initial partial data following the new specification will be available by the end of 2024, with full adoption of the new specification anticipated by the start of 2025.

III. Data collection on active modes

11. Active modes, which includes cycling and walking, have gained prominence for their health benefits and zero emissions. Notably, cycling has experienced a surge in popularity during the COVID-19 pandemic and has continued into the aftermath, particularly in nations with previously low usage rates.

12. Data on active modes is typically collected more readily than data on new mobility, if a country collects them at all. Moreover, the Inland Transport Committee Strategy on Reducing Greenhouse Gas Emissions from Inland Transport (ECE/TRANS/WP.6/2024/3) emphasizes the importance of promoting data collection on active modes and baseline data on travel patterns to guide policy design and objectives.

¹ Draft concept note of Task Force on Collecting Data on Emerging Mobility Patterns, ITF, January 2022.

² www.gov.uk/government/statistics/reported-road-casualties-great-britain-e-scooter-factsheet-2022.

³ www.gov.uk/government/statistics/serious-e-scooter-casualties-comparing-police-and-hospital-data.

13. The Pan-European Master Plan for Cycling Promotion,⁴ undertaken within the framework of The Transport, Health and Environment Pan-European Programme (THE PEP) partnerships, highlights in its recommendations the need to enhance cycling statistics for effective monitoring and benchmarking across the pan-European region. The recommended minimum indicators include:

- The modal share of cycling;
- The annual number of passenger-kilometres cycled per capita;
- The annual number of cyclist fatalities per kilometre cycled;
- The number of kilometres of cycle infrastructure;
- The average number of bicycles per inhabitant and per household, and;
- The number of bicycles sold annually.

IV. Data collection efforts by countries and international organizations on active modes

A. The Netherlands

14. *Onderweg in Nederland* (ODiN) is a travel survey conducted in the Netherlands since 2018 through an internet-based platform. The survey targets individuals aged six years and above. It collects data on a variety of metrics, including the number of trips undertaken, the number of stages within each trip, distanced travelled (both an average per person per day and an average distance per trip), travel time, and the percentage of traffic participation.

15. A significant challenge identified in the survey pertains to the accurate capture of journeys made on foot. Several issues have been highlighted:

- (a) Respondents often fail to record journeys made on foot, particularly shorter trips or stages at the beginning and end of a trip;
- (b) Smaller journeys on foot are frequently omitted from survey responses;
- (c) Reliance on self-reporting for walking trips creates discrepancies in data accuracy and completeness.

16. To mitigate the challenges of self-reporting, the survey results have been compared with data measured by smartphones, which record all walking movements of the users. However, this comparison introduces new challenges, primarily because the operational definitions of “trip” and “stage” used by smartphone tracking applications often do not align with the survey’s criteria, leading to inconsistencies in data interpretation.

B. Poland

17. In Poland, the General Directorate of Roads and Motorways (GDDKiA) primarily focuses on motor-vehicle traffic volume on national roads, which mostly handle international and interregional traffic. For the General Traffic Census conducted every five years, the national road network is divided into counting sections of varying length, from a few hundred meters in cities to up to 30 kilometres beyond cities. These sections are intended to represent homogenous motor vehicle traffic.

⁴ <https://unece.org/info/THE-PEP/pub/376488>.

18. Bicycle traffic, typically used for short-distance travel within cities or between villages, poses challenges in achieving consistent representation within GTC counting sections located outside cities. The bicycle traffic data collected at these counting points may not accurately represent the entire section of, for example, 20 kilometre. However, where possible and reasonable, bicycle traffic data are collected at selected road cross-sections. It is advisable to analyse such data over shorter distances than the actual length of the counting section.

19. Due to the nature of bicycle traffic, counting sections should be shorter, and divided at junctions with lower-tier roads (other than national or voivodship). However, implementing such an approach would significantly increase census costs without adding substantial value to motor-vehicle traffic data. GDDKiA's primary strategy focuses on diverting bicycle traffic from main roads to dedicated bicycle routes. This approach, combined with new motorway and expressway investments, has led to a decrease in motor vehicle traffic on minor roads, thereby increasing the safety of cyclists – as evidenced by a decline in cyclist-related accident rates.

V. Discussion and concluding remarks

20. Accurate data capture for new mobility and active modes presents challenges due to the diverse nature of these mobility modes and the common underreporting of shorter journeys. Standardizing data formats is critical to effectively integrate information from traditional surveys, big data, and sensor data.

21. Reliable data on modal share and travel patterns is essential for prioritizing infrastructure investments that align with community needs. Ensuring data quality requires addressing issues such as inconsistencies in data definitions, data gaps, and potential biases.

22. This document aims to initiate a discussion within the Working Party on the feasibility and methods of integrating data on new mobility and active modes into the Common Questionnaire framework. Member States are invited to share their experiences and challenges in conducting travel surveys, especially those incorporating new and shared mobility data. Insights into collaborations with private sector service providers or independent data collection efforts would be particularly valuable.
